

Notice of Allowability

Application No.

10/619,645

Examiner

Jason Crawford

Applicant(s)

AGRAWAL ET AL.

Art Unit

2819

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/20/2006.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All ☐ Some* ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

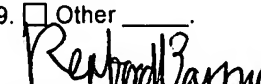
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


REXFORD BARRIE

SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Allowable Subject Matter

Claims 1-20 are allowed. The following is an examiner's statement of reasons for allowance:

In regards to Claim 1, the prior art does not directly disclose of a programmable logic device comprising input/output buffers adapted to programmably support a plurality of signal types, a serializer deserializer circuit adapted to receive a serial input data stream and extract a clock and provide a parallel data output signal and further adapted to receive a parallel data input signal and provide a serial output data stream and a programmable interconnect adapted to selectively coupled the input/output buffers to the serializer deserializer circuit, nor would it have been obvious to one of ordinary skill in the art to do so. Therefore, Claims 2-9 are also allowed by default as being dependent on the allowable Claim 1.

In regards to Claim 10, the prior art does not directly disclose of a programmable interface circuit within a programmable logic device comprising input/output buffers adapted to support a number of input/output signal types, means for providing serializer/deserializer and clock and data recovery and means for programmably coupling the providing means to input/output buffers for high-speed serial signal streams transferred through the input/output buffers which exceed a core clock rate of the programmable logic device, nor would it have been obvious to one of ordinary skill in the art to do so. Therefore, Claims 11-16 are also allowed by default as being dependent on the allowable Claim 10.

In regards to Claim 17, the prior art does not directly disclose of a method of providing a programmable interface for a programmable logic device, the method comprising providing buffers adapted to programmable transfer a number of different signal types to and from the programmable logic device and providing a programmable interconnect to selectively couple or decouple an interface circuit having a serializer, deserializer, and clock and data recovery capability, to the buffers depending upon the signal type, nor would it have been obvious to one of ordinary skill in the art to do so. Therefore, Claims 18-20 are also allowed by default as being dependent on the allowable Claim 17.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Crawford whose telephone number is 571-272-6004. The examiner can normally be reached on Monday - Friday 7am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rex Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2819

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMC


REXFORD BARNIE
SUPERVISORY PATENT EXAMINER